UNITED STATES DISTRICT COURT
MIDDLE DISTRICT OF TENNESSEE
NASHVILLE DIVISION

PHG TECHNOLOGIES, LLC,	)	
	)	
Plaintiff,	)	
	)	
v.	)	
	)	**No. 3:05-1091**
TIMEMED LABELING SYSTEMS, INC.,	)	**Judge Echols**
LASERBAND LLC, and	)	
HOLDEN GRAPHIC SERVICES,	)	
	)	
Defendants.	)	

MEMORANDUM

Pending before the Court is Defendant LaserBand LLC's ("LaserBand's") Motion to Correct Inventorship and Dismiss Patent Infringement Counts (Docket Entry No. 47), to which Plaintiff PHG Technologies, LLC ("PHG") has responded in opposition.

PHG brings this action against LaserBand and two other Defendants seeking to enforce design patents on medical label sheets, U.S. Patent Des. No. 496,405 S ("the '405 patent") (Plaintiff's Ex. 5), and U.S. Patent Des. No. 503,197 S ("the '197 patent") (Plaintiff's Ex. 6), and to protect its "EasyID" trademark. PHG's Complaint includes claims against all Defendants for patent infringement under 35 U.S.C. §§ 284 & 285 (Counts I & II); false description and false designation of origin under 15 U.S.C. § 1125 (Count III); unfair or deceptive practices under the Tennessee Consumer Protection Act ("TCPA"), Tenn. Code Ann. §§ 47-18-104 & 47-18-109 (Count IV); and trademark infringement and

unfair competition under Tennessee common law (Counts V & VI). The Complaint also includes claims against Holden Graphic Services for trademark infringement under 15 U.S.C. § 1114 (Count VII); unfair competition under 15 U.S.C. § 1125 (Count VIII); unfair or deceptive practices under the Tennessee Consumer Protection Act ("TCPA"), Tenn. Code Ann. §§ 47-18-104 & 47-18-109 (Count IX); and trademark infringement and unfair competition under Tennessee common law (Counts X & XI).

On June 30, 2006, the Court held a hearing on LaserBand's pending Motion which seeks an Order: (1) directing the Commissioner of the United States Patent and Trademark Office, pursuant to 35 U.S.C. § 256, to correct inventorship by adding James M. Riley as an inventor on the '405 and '197 patents; and (2) dismissing without prejudice PHG's patent infringement counts for lack of standing as a result of PHG's failure to join all Plaintiffs in the suit, where LaserBand, the assignee of Riley's ownership rights in the patented invention, expressly refuses to join in the suit as a Plaintiff.

I. FACTS

James M. Riley is founder, principal owner, and Chairman of LaserBand, a limited liability company located in Missouri. Riley is also founder, principal owner, and President of Riley, Barnard, and O'Connell ("RB&O"), an established St. Louis, Missouri company which designs and distributes business forms and labels. Riley has

been in the business of designing and selling business forms and label sheets for more than 32 years. His companies concentrate on supplying products to the healthcare industry. Riley is a named inventor on ten (10) issued U.S. patents, and he has additional U.S. and foreign patents pending on business forms.

Riley started RB&O in 1985 after working several years for Standard Register. By the mid-1990's RB&O provided forms and labels to Phelps County Regional Medical Center in Rolla, Missouri. Riley's contact there was Susan Moyer, Phelps' Director of Registration. Through that business relationship, Riley was introduced to Brian Moyer, Susan's husband, in the mid-1990's.

At that time, Brian Moyer sold computer software through his company, Midwest Technologies, to healthcare facilities to assist them in capturing expenses. One of Moyer's products, "CartSort," worked in tandem with a "piggyback label,"[1] which Riley designed and RB&O supplied to Phelps.

Between 1994 and 1996, Moyer developed software using a laser printer-generated patient identification label sheet that would allow hospitals to replace embossers and imprinters used to imprint forms. While developing this patient bar-code software, Moyer asked Riley to create a laser-printable label sheet to be used with the software. Moyer asked Riley to provide the label sheet to

[1]A "piggyback" is a self-adhering label affixed to a carrier that is attached to a surface, so that the label can be removed from the carrier for application elsewhere.

Midwest Technologies so that it could be resold to software clients at a profit.

Moyer and Riley discussed various designs for a label sheet to accompany the software. Moyer's contribution to the design was providing feedback from end users about the information that should be placed on the labels. Moyer provided Riley with the size of the barcodes produced by his software, along with the additional data intended to be printed on the labels, such as patient name and admission date. Based on the information Moyer provided, Riley determined each label needed to be 2 5/8" x 1" in size.

Moyer wanted to use an existing stock, laser-printable label sheet which consisted of a uniform matrix of thirty rectangular labels in three columns of ten labels each, centered and die cut into an 8 1/2" x 11" sheet. Riley obtained such a label sheet, called the "2610," from Continental Data Label. The columns on the sheet were divided by perforations, and the labels had rounded corners. The label sheet did not have holes punched in the top or left side margins. Rather, the label sheet was inserted into a plastic sleeve with five punch holes, and the plastic sleeve holding the labels was then inserted into a patient chart for use. (Plaintiff's Ex. 10.)

Riley realized that several design options existed for improving the stock label sheet. Riley suggested to Moyer that the label sheet should be modified to include five 1/4" diameter punch

holes along the top of the sheet and three (eventually seven) 1/4" punch holes along the left margin, that the size of individual labels should be reduced to 2 ½" x 1", and that the matrix of thirty rectangular labels should be shifted to the right and down to create room for the punch holes. Riley kept contemporaneous notes of these suggested changes. (Defendant's Ex. 2.) Moyer agreed to adapt his software to accommodate the changes, and Riley obtained pricing information for Moyer. (Defendant's Ex. 3.) Riley's testing of paper stocks and adhesives revealed that a pattern adhesive should be used.[2]

As produced in this form, Riley called the label sheet the PLS-103. (Defendant's Ex. 1.) "PLS" stood for "patient labeling system," which was the name of Moyer's software. There is no evidence before the Court that Riley obtained a patent on the design of the PLS-103. LaserBand did register a copyright in the artwork of the PLS-103. Riley did not obtain from Moyer an assignment of any rights Moyer or PHG might have in the PLS-103.

Riley and Moyer worked on the original design of the PLS-103 over a one and one-half-year period. At the time the PLS-103 was created in 1996, there were no other laser label sheets on the

[2]Pattern adhesive is applied to the back of the face stock so that there is no adhesive within 1/16th of an inch around the outside perimeter of the sheet. When the label sheet is printed and warmed as it runs through the laser printer, the non-adhesive area allows room for the adhesive to flow without extending beyond the edge of the sheet and contaminating the laser printer. (Duffett Depo. at 60-61.)

market which included all of the same features, even though many laser label sheets with three columns of labels were available on the market. Riley procured a manufacturer to produce the PLS-103, RB&O held quantities of the PLS-103 in its warehouse, and RB&O sold thousands of the label sheets to Midwest Technologies as needed for resale to Moyer's software clients. Riley assisted Moyer in promoting his software and label products.

In 1998 Moyer teamed with Thomas Stewart to form PHG Technologies. PHG and RB&O continued a business relationship through an operating agreement first reached in 1998 and amended in 1999. (Defendant's Ex. 4.) PHG purchased the PLS-103 from RB&O for resale to clients. PHG also purchased other labels from RB&O, including the PLS-102, which included a horizontal matrix of twenty labels and a self-laminating patient identification wrist band. (Defendant's Ex. 7.) Riley created the PLS-102 for his largest client, and he obtained a patent on it. Although Riley had discussions with Moyer about the design of the PLS-102, Riley does not consider Moyer to be a co-inventor of the design. Similar label sheets with wristbands were produced by other competitors, including Standard Register. (Defendant's Ex. 8; Plaintiff's Ex. 9.)

By 1999, RB&O was involved in litigation with Standard Register that concerned the PLS-102. PHG was very close to landing a major contract with HCA hospitals in Nashville to supply the PLS-

102 and related software, but Standard Register "scared away" that business. Riley informed PHG that RB&O might have to stop selling the PLS-102. This caused concern because PHG did not want to lose its label sheet supplier.

Moyer approached Ward/Kraft and Avery Dennison about manufacturing the PLS-103 directly for PHG. Both manufacturers contacted Riley about Moyer's request. Riley told them they could manufacture the PLS-103 for Moyer. It appears that Ward/Kraft would not manufacture the PLS-103 for PHG. (Moyer Depo. at 47-49.) Avery Dennison declined because it did not want to impair its business relationship with Riley and RB&O. (Duffett Depo. at 34-35.)

Around the same time, other concerns surfaced in the business relationship between PHG and RB&O. Riley asked PHG to forego its profit on the PLS-102, which PHG did not want to do. Also, believing that PHG had an unwritten agreement to serve as the exclusive re-seller of the PLS-102 for RB&O, Moyer and Stewart learned that RB&O was selling the PLS-102 to other distributors. End users of the PLS-102 reported various problems connected with the product, including the required use of two printer trays to print the PLS-102 and the PLS-103, inadequate wristband size, a lack of colored wristbands, inadequate closure of the wristband, and skin irritation caused by the wristband.

In response to all of these events and concerns, in late spring or early summer of 2000 Moyer and Stewart formulated new wristband and laser label products, "EasyID." PHG calls its medical label sheet the 20-101AW (Plaintiff's Ex. 11). The 20-101AW is the reduction to practice of the design claimed in the '405 and '197 patents.

In inventing the design, Moyer claims he used Microsoft Word to produce several iterations of the final design, trying both landscape and portrait, and moving different-sized labels around a blank page. He then discussed the designs with Stewart until they jointly agreed on the design depicted in the figures of the '405 and '197 patents. Stewart's contribution to the design as claimed is the shape of the labels in the bottom two rows.

The design depicted in the '405 patent is exactly like the design of the PLS-103 except for the bottom two rows of labels. The last row of the PLS-103 labels is divided into two rows of identification labels in the '405 patent. The two rows, as reduced to practice, include three pediatric-size wristband labels, two adult-size wristband labels, and one other label. To accommodate these labels of various sizes, the die cut of the 20-101AW extends closer to the bottom margin than does the die cut of the PLS-103. Otherwise, both label sheets include five punched holes at the top, seven punched holes at the left, and a matrix of three columns of nine labels of the same size shifted down and to the right.

As to the '405 patent, Riley claims he designed the placement, number, and sizing of the holes at the top and left sides of the design, the label matrix including the three-column format consisting of labels having the relative size shown to the overall sheet as well as the size of the individual labels included in all but the bottom rows, and the offset placement of the matrix of labels down and to the right from center. With regard to the '197 patent, Riley claims the three columns of 27 labels are the same as the design of his PLS-103. Riley assigned all of his right, title, and interest in and to the inventions disclosed and claimed in the '405 and '197 patents and his rights in the patents themselves, to LaserBand.

Moyer and Stewart claim that they conceived of the entire design claimed in the '405 and '197 patents and as reduced to practice in the 20-101AW, and that the bottom two rows represent the unique elements of their design. The Court finds, however, that Moyer and Stewart copied all of the elements of the PLS-103 except for the new die cuts in the bottom two rows of the design depicted in the '405 and '197 patents and reduced to practice in the 20-101AW.

Stewart conceded at his deposition that Moyer incorporated the design of the upper twenty-seven (27) labels of the PLS-103 into the 20-101AW. (Stewart Depo. at 73-74.) While there may have been, as Moyer testified, many label sheets with holes punched in

them available in the market at the time Moyer and Stewart designed the 20-101AW in 2000, Moyer and Stewart did not adopt the elements of punched holes and a pattern adhesive because those elements were common knowledge in the marketplace. Rather, Moyer and Stewart adopted the features because they were the hallmark of the PLS-103, and the PLS-103 had been a successful product for PHG.

On June 30, 2000, PHG ordered a die cut for the 20-101AW from Ward/Kraft. (Moyer Depo. at 51-53, 56.) On September 1, 2000, Moyer told Riley during a telephone call that PHG intended to end its business relationship with RB&O. Moyer informed Riley that he did not want to continue selling the PLS-102 and that he had developed another labeling solution. The Court finds Moyer described his solution to Riley, although Moyer denies that he did so. Consistent with the act of copying the PLS-103, Moyer told Riley he intended to modify the PLS-103 by adding die cuts to the bottom row to create labels to affix to the TabBand patient wristband product. Riley did not know at the time if Moyer's invention was completed. Riley told Moyer that he still believed the PLS-102 and the PLS-103 offered a better patient identification solution. Riley admits that he did not work with Moyer in designing the bottom two rows of the 20-101AW.

PHG received a test run of its 20-101AW product from Ward/Kraft in October 2000. About the same time, Gary Duffett, a salesman for Avery Dennison, approached Moyer about doing business

with him, unaware that Avery Dennison had previously refused to manufacture the PLS-103 for Moyer. After Moyer vented about his previous experience with Avery Dennison, Moyer and Duffett discussed the possibility of PHG and Avery Dennison doing business together. Duffett later provided Moyer with price quotes, and Avery Dennison supplied PHG with the PLS-103 and the "piggyback label" RB&O had previously supplied to PHG. (Duffett Depo. at 45.) Duffett had never seen a laser label sheet like the PLS-103, and he thought the combination of elements–-the pattern adhesive, the punch holes, the 2 ½" x 1" labels, and the correct face and liner stock–-made the PLS-103 a unique product that ran flawlessly through a wide variety of laser printers. (Id. at 58-64, 67-68.)

Moyer eventually spoke to Duffett about manufacturing the 20-101AW. Moyer told Duffett the model for the 20-101AW was the PLS-103, but a modification had been made to the bottom of the sheet. (Id. at 45-46, 50, 55.) In the Spring of 2001 Avery Dennison prepared a proof with the new die cuts at the bottom of the sheet, and one change was then made. (Id. at 49, 72.) Duffett's notes indicated that the 20-101AW was the same punch and adhesive configuration as the PLS-103, but the die cut outline was different. (Id. at 74.) Thereafter, Avery Dennison produced the 20-101AW for PHG.

In 2000 PHG stopped buying the PLS-103 from RB&O; however, PHG and RB&O continued a business relationship until 2001. Avery

Dennison provided label sheets to PHG after PHG stopped buying the product from RB&O. (Id. at 57.)

Riley then developed a medical label sheet similar to PHG's 20-101AW, which is called the PLS-303X. The PLS-303X has different die cuts, rounded corners on the labels and one less label at the bottom left of the sheet. Avery Dennison supplied one order for 50,000 sheets of the PLS-303X to LaserBand, shipped to RB&O. (Id. at 84, 86-87, 95, 109.) Avery Dennison was reluctant to produce the PLS-303X for RB&O because it had an agreement with PHG not to duplicate PHG's layout for anyone else. (Id. at 116.) Avery Dennison agreed to manufacture the PLS-303X for LaserBand, however, because it believed the PLS-303X was materially different from PHG's 20-101AW. (Id. at 116-118, 120-122.)

II. STANDARD OF REVIEW

The issue of inventorship is a mixed question of law and fact. While the overall determination of inventorship is a question of law, the legal issue is premised on underlying questions of fact. Eli Lilly & Co. v. Aradigm Corp., 376 F.3d 1352, 1362 (Fed. Cir. 2004); Ethicon, Inc. v. United States Surgical Corp., 135 F.3d 1456, 1460 (Fed. Cir. 1998).

III. ANALYSIS

Title 35 U.S.C. §§ 111, 115, and 116 require an applicant for a patent to disclose the names of all inventors. Title 35 U.S.C. § 256 creates a cause of action permitting a district court to correct an issued patent by adding the name of an inventor, so long

as the initial failure to include the inventor's name occurred without any deceptive intent on the part of the non-joined inventor. Eli Lilly & Co., 376 F.3d at 1358; Stark v. Advanced Magnetics, Inc., 119 F.3d 1551, 1554 (Fed. Cir. 1997). Correction of inventorship requires an inquiry into the intent of the non-joined inventor only. Stark, 119 F.3d at 1551.

The names of inventors on a patent are presumed to be correct, and a party asserting the failure to include an inventor's name on a patent carries a heavy burden to prove its position by clear and convincing evidence. Eli Lilly & Co., 376 F.3d at 1358. Corroborating evidence beyond the inventor's own testimony is required. Id.; Ethicon, Inc., 135 F.3d at 1461; Advanced Cardiovascular Sys., Inc. v. Scimed Life Sys., Inc., 106 F.3d 976, 980 (Fed. Cir. 1997) (explaining corroborating evidence is necessary to overcome the "strong temptation for persons who consulted with the inventor and provided him with materials and advice, to reconstruct, so as to further their own position, the extent of their contribution to the conception of the invention.").

Whether testimony is sufficiently corroborated is evaluated under a "rule of reason" analysis. Ethicon, Inc., 135 F.3d at 1461. The Court must consider all pertinent evidence to reach a sound determination of the credibility of the alleged inventor's claim. Id. Contemporaneous documents, circumstantial evidence, or oral testimony of someone other than the putative inventor may provide the required corroboration. Id.

"Inventors may apply for a patent jointly even though (1) they did not physically work together or at the same time, (2) each did not make the same type or amount of contribution, or (3) each did not make a contribution to the subject matter of every claim of the patent." 35 U.S.C. § 116. The entire inventive concept need not occur to each of the joint inventors, nor must two or more inventors physically work on the project together. Kimberly-Clark Corp. v. Procter & Gamble Distrib. Co., 973 F.2d 911, 916 (Fed. Cir. 1992).

> One may take a step at one time, the other an approach at different times. One may do more of the experimental work while the other makes suggestions from time to time. The fact that each of the inventors plays a different role and that the contribution of one may not be as great as that of another does not detract from the fact that the invention is joint if each makes some original contribution, though partial, to the final solution of the problem.

Id.

The statute "'sets no explicit lower limit on the quantum or quality of inventive contribution required for a person to qualify as a joint inventor.'" Eli Lilly & Co., 376 F.3d at 1358 (quoted case omitted). One can be a joint inventor, however, only if he makes a contribution to the conception of the claimed invention that is not insignificant in quality when that contribution is measured against the dimension of the full invention. Id.

"Conception is the touchstone of inventorship, the completion of the mental part of invention." Burroughs Wellcome Co. v. Barr Labs., Inc., 40 F.3d 1223, 1227-1228 (Fed. Cir. 1994). Conception can be defined as the "formation in the mind of the inventor, of a

definite and permanent idea of the complete and operative invention, as it is hereafter to be applied in practice." Burroughs Wellcome Co., 40 F.3d at 1227-1228. An idea is sufficiently "definite and permanent" when "only ordinary skill would be necessary to reduce the invention to practice, without extensive research or experimentation." Id. at 1228. "The line between actual contributions to conception and the remaining, more prosaic contributions to the inventive process that do not render the contributor a co-inventor is sometimes a difficult one to draw." Eli Lilly & Co., 376 F.3d at 1359. A contribution may not concern conception if it merely explains what was then state of the art, or if it is "too far removed from the real-world realization of an invention," or if it is focused solely on the realization. Id. One is not a joint inventor if he provides the inventor with well-known principles or explains the state of the art without ever having a firm and definite idea of the claimed combination as a whole. Ethicon, Inc., 135 F.3d at 1460.

The critical question is *who* conceived the subject matter of the claim at issue. Id. Joint inventorship occurs only when colloboration or concerted effort exists: "when the inventors have some open line of communication during or in temporal proximity to their inventive efforts[.]" Id. Put another way, "'joint invention is the product of *collaboration* of the inventive endeavors of two or more persons *working toward the same end* and producing an invention by their *aggregate* efforts.'" Kimberly-Clark Corp., 973 F.2d at 916 (quoting Monsanto Co. v. Kamp , 269 F.Supp. 818, 824

(D.D.C. 1967) (emphasis in original)). Each inventor must work on the same subject matter and make some contribution to the inventive thought and to the final result. Id.

In this case, Riley did not collaborate with Moyer and Stewart to work toward the same end to produce, by their aggregate efforts, the design depicted in the '405 and '197 patents. Riley admitted as much during his testimony. Only Moyer and Stewart conceived of the novel die cuts placed at the bottom of the sheet which are depicted in the patented design and which are reduced to practice in PHG's 20-101AW medical label sheet. Those die cuts are what make the patented design unique and distinguish it from LaserBand's PLS-103. Moyer and Stewart collaborated to produce the patented design, but Riley was not asked to, nor did he, contribute any inventive spark in conceiving of the placement of pediatric and adult wristband labels in the bottom rows of the design. Moyer told Riley of his intent to modify the PLS-103, but he did so only after he and Stewart had invented the design shown in the '405 and '197 patents. There was no open line of communication between Riley and Moyer in 2000 which encouraged or permitted Riley to collaborate in PHG's patented design.

Because Riley has not shown by clear and convincing evidence that he conceived of PHG's patented design and that he possessed the necessary intent to collaborate with Moyer and Stewart to work toward the same end to invent the patented design, Riley does not qualify as a joint inventor, and his name should not be added to the '405 and '197 patents. As a consequence, his motion to correct

inventorship and to dismiss PHG's patent infringement counts must be denied.

It appears to be undisputed in this case that, at an earlier time, Riley invented all of the other features depicted in the '405 patent: the placement, number, and sizing of the punch holes at the top and left sides of the design, the label matrix including the three-column format consisting of labels having the relative size shown to the overall sheet as well as the size of the individual labels included in all but the bottom rows, the offset placement of the matrix of labels down and to the right from center, and the use of pattern adhesive. There is sufficient corroborating evidence in the record to prove Riley's invention by clear and convincing evidence, especially Riley's contemporaneous notes about the PLS-103, and Duffett's and Stewart's testimony, which confirmed that Moyer appropriated the PLS-103 as the model for PHG's design depicted in the '405 and '197 patents.

Although Riley relies on Pannu v. Iolab Corp., 155 F.3d 1344 (Fed. Cir. 1998), as a case "on all fours with the case at bar[,]" (Docket Entry No. 75, Reply at 10), Pannu is distinguishable. There the inventor of an intraocular lens applied for a patent and then met with a lens manufacturer to discuss a license for the invention. Pannu, 155 F.3d at 1346. The manufacturer's representative, Link, suggested that Pannu's lens could be manufactured from a single piece of clear plastic. Following their meeting, the manufacturer made several prototype single-piece

lenses which Pannu successfully implanted into the eyes of his patients. Id. Pannu then filed a continuation-in-part application disclosing and claiming a single-piece lens, but without naming Link as an inventor. Id. In subsequent patent infringement litigation, Link claimed to be a co-inventor of the single-piece lens, if not the sole inventor. Id. at 1347. The court ruled that Iolab's invalidity defense based on improper inventorship should have been submitted the jury because it was "undisputed that Pannu and Link collaborated in the development and production of one-piece prototype embodiments of the invention[,]" and it was "undisputed that the invention was conceived while Link and Pannu were engaged in a collaborative enterprise[.]" Pannu, 155 F.3d at 1351. Here, as the Court has shown, Riley did not collaborate with Moyer and Stewart on the invention claimed in the '405 and '197 patents.

Thus, although the Court has ruled that Riley is not a joint inventor of the final design claimed by PHG in the '405 and '197 patents, it has addressed only the issues raised in LaserBand's Motion to Correct Inventorship and Dismiss Patent Infringement Counts. No effort has been made to examine other possible claims which may be made by either party.

IV. CONCLUSION

For the reasons stated, Defendant LaserBand LLC's ("LaserBand's") Motion to Correct Inventorship and Dismiss Patent Infringement Counts (Docket Entry No. 47) will be DENIED.

An appropriate Order shall be entered.

ROBERT L. ECHOLS
UNITED STATES DISTRICT JUDGE